

## Onions Are Safe Sheep Feed

Onions can be fed safely to sheep and provide as much weight gain as high-quality whole sorghum, says ARS animal scientist Rick Estell.

There had been concern that naturally occurring sulfides in onions would cause anemia—and possibly death.

Estell and Ed Fredrickson, an animal scientist with New Mexico State University who is assigned to the ARS Range Management Research Unit at Las Cruces, New Mexico, fed chopped fresh-market onions to 71 wethers—castrated males raised for meat production.

Their feeding studies, conducted under a cooperative permit with the La Tuna Federal Corrections Institute at Anthony, Texas, lasted 6 weeks.

In a diet that was half sorghum and half alfalfa, onions replaced from a third to all of the sorghum. Weight gains for sheep getting the onions were similar to those for sheep fed the more traditional sorghum/alfalfa mix.

The scientists did measure slight damage to red blood cells, but this was short-lived; cell counts returned to normal after feeding stopped.

In the United States, nearly 3 million tons of commercial onions are grown annually. But in some areas, 15 to 40 percent are culled for being unmarketable. And when production exceeds demand, entire fields may go unused.

The culls pose a problem for growers, who are finding it more difficult to locate sanitary landfill operators who will accept them. Left in fields, the onions can cause diseases that will affect the next onion crop, and pilfering reduces local demand for marketable onions.

California, Colorado, Idaho, New Mexico, Oregon, and Texas are major producers of both sheep and onions.

“Now, sheep producers have the option of using onions for feed if their price is lower than available grains,” says Fredrickson.

The scientists stress that sheep being fed onions must also receive high-quality protein from alfalfa or other feeds to achieve sufficient weight gains and avoid sickness. They also say onions haven’t been satisfactory in other livestock diets, but they believe inexpensive methods might be found to minimize onion toxicity.—By **Dennis Senft, ARS.**

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